

**MARBLEHEAD REPORTER**

## Sustainable Marblehead: Plastic Free July

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It's no small thing to take plastic out of our lives. It carries our drinks, it keeps our groceries fresh, it's wonderfully waterproof and light, and it protects our homes through insulation and sealants. Originally developed from cellulose (a plant material), synthetic plastic production started in 1907 and exploded 50 years ago. It hasn't stopped, which has led to some very real problems. Sustainable Marblehead is once again promoting Plastic Free July, for which we've created a calendar with daily recommendations that you can find on our website.

Let's look at four of the top single-use plastic items, what they reveal about plastic's impact, and what we can all do about it starting today.

### 1. Plastic Water Bottles and Carbon Emissions

As easy as it is to grab that shiny plastic water bottle, the consequences are worth noting. Seventeen million gallons of oil are used to produce bottled water each year, which includes the raw material for the bottles and the energy used to manufacture them. While most of us focus on the waste plastic produces, if plastic producing companies were a country, they would make up the fifth largest carbon emitting country on the planet (that's all plastic, not simply water bottles). To make matters worse, water bottles need 2,000 times the energy used to produce tap water.

**What to do:** Use a reusable water bottle and fill it with tap water. Marblehead's Recreation and Parks Department is making it easier to do by installing four watering stations in town, including at Crocker Park, Gatchell Playground, Chandler Hovey Park, and Seaside Park.

### 2. Single-Use Plastic Bags and Waste

Even though 140 Massachusetts cities and towns (Marblehead included) have passed laws to limit their use, single-use thin-film plastic bags continue to clog our waterways, landfills, and beaches. Fourteen billion of these bags are used annually in the United States, and each one takes anywhere from 20 years to degrade in ocean water to 1,000 years in a landfill.

Overall, 350 million tons of plastic are produced each year, half for single-use plastic bags. About 15 million metric tons end up in our oceans. Plastic doesn't break down like biodegradable matter, and the EPA has stated that every piece of plastic ever produced still exists on our planet. It's no wonder that when volunteers clean up our local beaches, the plastic they find is mostly washed up, rather than littered directly on the beach.

**What to do:** Always use reusable bags or containers.

### 3. Disposable Coffee Cups and Plastic Additives

What better way to start off a morning in Marblehead than to get a customized cup of coffee before hitting the road? This one might hurt. Even if the cup looks like it's paper, it turns out that disposable coffee cups are manufactured with 5% polyethylene as a protective lining, thereby making them part plastic and unrecyclable.

The plastic in the coffee cup lining, like all plastic, is made with endocrine-disrupting chemicals (EDCs), which according to a December 2020 report by the Endocrine Society and IPEN (International Pollutants Elimination

Network) leach from all plastic at every point of contact with it. The EDC leaching from a coffee cup lining is called phthalates.

What's the danger of endocrine disruption? There are many. Specifically, if a pregnant woman is exposed, it can endanger the health of her children and grandchildren. These disrupters contribute to many major diseases and can cause early female puberty, male reproductive problems, and other health issues.

**What to do:** Bring your own reusable cup to your favorite coffee shop, make your own hot beverage at home, or give up caffeine altogether. Just kidding about that last one.

#### **4. Plastic Straws and Microplastics**

A couple of years ago, there was a big push to reduce plastic straw consumption. Not everyone was happy about this, since it put the onus on consumers instead of industry and some people need to use straws for health reasons. However, it's still important to know the impact. Approximately 500 million single-use plastic straws are used every day, but since they are number 5 plastic, they are not easily recycled. Like plastic bags, they are clogging up our oceans, waterways, and beaches.

Plastic straws, like other plastic, break down into tiny particles called microplastics that can leach into the air, water, food, and, potentially, human body tissue. There's a reason you likely consume a credit card's worth of plastic every week. Birds, fish, and other wildlife regularly consume these particles as well. Other floating microplastics are turning into giant plastic islands in the ocean, which prevent sunlight from reaching algae and marine plankton. The organisms are the foundation of the entire marine food chain, which means we could soon see a significant decrease in marine wildlife, including fish and seafood for human consumption.

**What to do:** Get a reusable metal or paper straw or sip directly from the cup or glass.

Plastic Free July originated in Australia, and 177 countries around the world currently participate. To do our part, Sustainable Marblehead is offering the following:

#### **Plastic Free July Daily Calendar**

Daily suggestions are available on our website at <http://sustainablemarblehead>.

Plastic Free July Event: Jennifer Lewis of MacRae's Sustainable Goods is hosting a conversation about "How to Use Less Plastic" at 6 p.m. July 7 at her store at 108 Washington St. Space is limited. RSVP at <https://bit.ly/lessplastic77>.

Thank you for joining us. Together we can be part of the solution!

*Christina Frei is a member of Sustainable Marblehead's Conservation Working Group.*